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March 19, 2012

Ex Parte via Electronic Filing

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: *Universal Service Contribution Methodology*, WC Dkt. 06-122; *Connect America Fund*, WC Dkt. 10-90; *A National Broadband Plan for Our Future*, GN Dkt. 09-51; *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Dkt. 07-135; *High-Cost Universal Service Support*, WC Dkt. 05-337; *Developing* a *Unified Intercarrier Compensation Regime*, CC Dkt. 01-92; *Federal-State Joint Board on Universal Service*, CC Dkt. 96-45; *Lifeline and Link-Up*, WC Dkt. 03-109.

Dear Ms. Dortch:

On March 15, 2012, Adrienne T. Biddings, Telecom Policy Counsel with Google Inc., E. Ashton Johnston and the undersigned, of Lampert, O'Connor & Johnston, P.C., met with Carol Mattey, Rebekah Goodheart, Vickie Robinson, and Trent Harkrader of the Wireline Competition Bureau to discuss the universal service fund contribution mechanism.

Google noted that there is wide support among stakeholders for a fresh examination of the current revenues-based universal service contribution system. Google strongly supports the Commission's goal, as set forth in the *USF/ICC Transformation Order*, of minimizing universal service contribution burdens on consumers and businesses.[1] To that end, Google urged the Bureau to refresh the record on alternative contribution mechanisms, including in particular a connections/capacity-based mechanism, which Google believes would create a forward-looking approach to supporting the Connect America Fund and the remaining legacy universal service support mechanisms. We discussed the framework of such an approach, as described in the

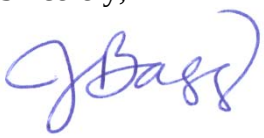
[1] *In the Matter of Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 2011 FCC LEXIS 4859, ¶ 57 (2011) ("*USF/ICC Transformation Order*").

August 18, 2011 *ex parte* letter submitted by supporters of the Tech/Users Framework.[2] We stated that such a technology-neutral approach would mirror the shift of communications networks and services to broadband and IP, be equitable to all users of the public network (both residential and business), and provide a stable and predictable mechanism for consumers and administrators of the funds.

Google observed that the Commission last sought comment on comprehensive USF contributions reform that included a connections-based mechanism approach in 2002. We suggested that it would be appropriate, particularly in the wake of the creation of the Connect America Fund and other USF-related reforms, to revisit such an approach and to refresh the record on issues including how to define a connection; how to calculate an appropriate base factor and tier levels; how to measure capacity; how to calculate assessments; the effect of a tiered approach on various classes of users; the impact on different industry segments; and the benefits and costs of various alternative contribution mechanisms.[3]

Pursuant to the Commission's rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me directly should you have any questions.

Sincerely,



Jennifer P. Bagg
Counsel for Google Inc.

Attachment

cc: Carol Mattey
Rebekah Goodheart
Vicki Robinson
Trent Harkrader

[2] *See* Letter from Ad Hoc Telecommunications Users, Google Inc., Skype Communications S.A.R.L., Sprint Nextel Corporation, and Vonage Holdings Corp., to Julius Genachowski, Chairman, FCC, *et al.*, WC Dkt. 10-90, *et al.* (filed Aug. 18, 2011) (copy attached).

[3] *See In the Matter of Federal-State Joint Board on Universal Service*, Further Notice of Proposed Rulemaking and Report and Order, 17 FCC Rcd. 3752, ¶¶ 34-83 (2002).

August 18, 2011

Electronic Filing

Chairman Julius Genachowski
Commissioner Michael Copps
Commissioner Robert McDowell
Commissioner Mignon Clyburn
Federal Communications Commission
445 Twelfth Street, S.W.
Washington, DC 20554

Re: *Connect America Fund*, WC Dkt. 10-90; *A National Broadband Plan for Our Future*, GN Dkt. 09-51; *Establishing Just and Reasonable Rates for Local Exchange Carriers*, WC Dkt. 07-135; *High-Cost Universal Service Support*, WC Dkt. 05-337; *Developing* a *Unified Intercarrier Compensation Regime*, CC Dkt. 01-92; *Federal-State Joint Board on Universal Service*, CC Dkt. 96-45; *Lifeline and Link-Up*, WC Dkt. 03-109; *Universal Service Contribution Methodology*, WC Dkt. 06-122.

Dear Mr. Chairman and Commissioners:

It has been over six months since the Federal Communications Commission (FCC or Commission) embarked on its comprehensive rulemaking to update the nation's intercarrier compensation regime (ICC) for telecommunications traffic exchange and the federal system supporting universal communications service (USF).[1] It is increasingly apparent that action is both vitally necessary and highly challenging. Though these issues have historically been the province of a limited number of wireline telephone companies, the reality is that all stakeholders must work cooperatively to transition yesterday's policies and rules to the modern networks and services of the future. The FCC, the states, all segments of industry, users and consumers have an indisputable interest in a forward-looking regulatory foundation that supports rapid, efficient, reliable, and flexible networks.

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[1] *In the Matter of Connect America Fund*, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, 26 FCC Rcd. 4554 (2011) ("NPRM"); *Further Inquiry Into Certain Issues in the Universal Service-Intercarrier Compensation Transformation Proceeding*, Public Notice, DA 11-1348 (Aug. 3, 2011).

We support swift and decisive FCC action to promote universal broadband connectivity and advanced Internet protocol (IP) networks that are so critical to our economic recovery and global competitiveness. While industry proposals submitted in the record provide useful perspectives regarding reform possibilities,[2] the FCC must weigh how these proposals impact *all* parties, including the users and high-tech and online companies that inherently create the Internet's value and who bear the real costs of subsidies and network traffic charges. The suggested lengthy transition period to more cost-based traffic termination rates and extension of the antiquated carrier access charge regime to voice over Internet Protocol (VoIP) applications are likely to be felt most negatively by users large and small of IP-based offerings. Saddling emerging IP applications and services with yesterday's regulatory mandates would be a significant step away from the nation's broadband goals and would send the wrong signals to technology innovators, investors, and users. Instead, the Commission should move forward in this proceeding to set a future-focused course for ICC reform, including the IP-to-IP interconnection obligations of local carriers.

As it considers the way forward, the FCC should ensure that its carrier compensation and subsidy policies further the two important and interlinked national priorities. First, as the FCC emphasized in the *National Broadband Plan*, our country can and should increase broadband deployment and adoption.[3] As the FCC well knows, "broadband is no longer a luxury."[4] All Americans should enjoy universal broadband connectivity that becomes faster and better as technology improves. Second, as the Commission reiterated in launching its NPRM, the goal of fully transitioning legacy TDM networks to all-IP is in our country's best interest.[5] Though much of the nation's communications networks have already been upgraded and enjoy the benefits of IP,[6] we are still far from end-to-end IP transmission everywhere. The payback of meeting these goals will be far-reaching for users, service providers, carriers, innovators and the public generally. Indeed, to the extent that VoIP services are not being deployed to all Americans, Section 706 of the Telecommunications Act of 1996 *requires* the FCC to "accelerate

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[2] *See* Letter from AT&T, CenturyLink, FairPoint Communications, Frontier, Verizon and Windstream, to Julius Genachowski, Chairman, FCC, *et al.*, WC Dkt. 10-90, *et al.* (filed July 29, 2011) ("*Large Carrier Plan*"); Letter from United States Telecom Association, AT&T, CenturyLink, FairPoint Communications, Frontier, Verizon, Windstream, National Telecommunications Cooperative Association, OPASTCO, and Western Telecommunications Alliance, to Julius Genachowski, Chairman, FCC, *et al.*, WC Dkt. 10-90, *et al.* (filed July 29, 2011) ("*Rate-of-Return Carrier Plan*").

[3] Omnibus Broadband Initiative, *Connecting America: The National Broadband Plan*, GN Dkt. 09-51 (rel. Mar. 16, 2010) ("*National Broadband Plan*").

[4] Letter from Sen. John Kerry (D-Mass.) and Sen. Mark Warner (D-Va.) to Julius Genachowski, Chairman, FCC, *et al.* (filed July 5, 2011).

[5] *See* NPRM at ¶¶ 506, 527; *National Broadband Plan* at 59, 142. *See also, e.g.*, Comments of COMPTEL at 2, 9, WC Dkt. 10-90, *et al.* (filed Apr. 18, 2011); Comments of Comcast Corporation at 3-6, WC Dkt. 10-90, *et al.* (filed Apr. 18, 2011); Comments of the Kansas Corporation Commission at 36-37, WC Dkt. 10-90, *et al.* (filed Apr. 18, 2011); Comments of the California Public Utilities Commission at 20-22, WC Dkt. 10-90, *et al.* (filed Apr. 18, 2011).

[6] *See* Letter from Kirk Burgee, Chief of Staff, Wireline Competition Bureau, to Marlene H. Dortch, Secretary, FCC, WC Dkt. 10-90, *et al.* (filed May 3, 2011) attaching presentation by Fred Kemmerer, Chief Technology Officer, GENBAND, Inc., *Industry Trends: Circuit to Packet* at 11 (Apr. 26, 2011).

the deployment" of such services.[7] While the Commission has recognized that it should take actions that "encourage incumbent LECs to move to IP-to-IP interconnection,"[8] there is scant record evidence showing that such interconnections are being offered or provided in a timely manner.

The NPRM proposals move solidly in the right direction. To build upon the FCC's hard work, our companies offer the following framework to facilitate rapid broadband build-out and efficient network operations, while quickly transitioning ICC rates and addressing interconnection obligations. We also suggest a simplified and expanded USF contribution system, which would ensure reform will be truly comprehensive and that broadband support is equitable and sustainable. While some of the details we suggest differ or expand upon the NPRM, it is our expectation that this proposed framework will help move the ball forward to achieve the same future-state as is laid out in the NPRM. We look forward to engaging in a full and healthy dialogue among all interested parties.

I. A New Broadband Fund Should Replace Current Implicit ICC Support and USF.

The FCC has already taken a significant step with its Connect America Fund (CAF) proposal. The CAF is a progressive approach that embraces technological and marketplace developments by recognizing that USF policies should be updated to embrace modern communications networks capable of supporting the necessary applications to empower consumers to learn, work, prosper and innovate.[9] Though limited publicly-funded subsidies may be necessary to meet our national goal of universal broadband connectivity, the FCC is also spot-on in recognizing that recipient accountability, including defined obligations that serve the public interest, is an essential component of sensible reform.[10]

Consistent with the CAF, the most logical and helpful step is for the FCC to shift all subsidies to support broadband deployment and operations over a phase-in period, while at the same time eliminating the implicit subsidies that continue to distort user and network provider decisions.[11] This transition of resources from narrowband to broadband networks should be sufficiently lengthy to avoid flash-cuts; a goal of 2016 would meet these objectives. To maximize accountability and efficiency, a newly-created broadband connectivity fund (a "modified CAF") should have two separate distribution components – deployment ("Broadband Build") and operations ("Broadband Operations").

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[7] *See* 47 U.S.C. § 1302(b); *see also* 47 U.S.C. § 153(1) (VoIP services defined as an "advanced communication service").

[8] NPRM at ¶ 493.

[9] *Id.* at ¶ 80.

[10] *Id.* at ¶ 90.

[11] *Id.* at ¶ 15.

Broadband Build

The Broadband Build portion of the CAF would be technology neutral[12] and allow providers on a one-time basis to apply for funding to support broadband network build-out. By focusing universal service subsidies on support for broadband deployment in unserved areas, starting with the universalization target established in the *National Broadband Plan* of 4 Mbps downstream and increased over time to reflect technological developments, the FCC will go a long way to ensuring that everyone in the country has access to and can fully utilize a basic set of online applications and functions, including the 7 million unserved households identified by the *National Broadband Plan*.[13]

The FCC should gather and rely upon all available data, including from the states and localities, as well as from network providers of all technologies, to size and target these monies appropriately to unserved areas and ensure efficient broadband build-out is attained.[14] There is an important role for the states in ensuring efficient funding. The states are well situated to assess which areas are unserved and the necessary funding requirements to meet build-out needs, making them a logical and beneficial partner for the FCC.[15] States often have the best direct knowledge of their local and regional needs and challenges, and could maximize the benefit of both federal and state universal service funding in their jurisdictions. This process could also help leverage the resources and planning developed through NTIA's State Broadband Initiative.[16]

Under this approach, while initial build-out support has the potential to be relatively high for some period, thereafter, broadband networks will be deployed and providers may well have

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[12] The *Large Carrier Plan*, by contrast, proposes a right of first refusal for CAF support for wireline carriers, permitting wireless carriers to participate in an auction mechanism for support only in the event that an ILEC has not met a 35% build-out threshold or declines support. *Large Carrier Plan*, Attachment 1 (Framework of the Proposal) at 6-7. *Cf.* Letter from Steven F. Morris and Jennifer K. McKee, National Cable & Telecommunications Association, to Marlene H. Dortch, Secretary, FCC, Attachment at 3, WC Dkt. 10-90, *et al.* (filed July 29, 2011) ("High-cost support should be disbursed in a technology-neutral manner, with support going to the most efficient providers."); Letter from Steven K. Berry, President/CEO, and Rebecca M. Thompson, General Counsel, Rural Cellular Association, to Marlene H. Dortch, Secretary, FCC, at 6, WC Dkt. 10-90, *et al.* (filed Aug. 3, 2011) ("[I]t is wrong to embrace model-based CAF support only for wireline carriers. . . ."); Letter from A. Richard Metzger, Jr., Counsel for Comcast Corporation, to Marlene H. Dortch, Secretary, FCC, WC Dkt. 10-90, *et al.* (filed Aug. 3, 2011) (raising concerns regarding the *Large Carrier Plan* proposal to give ILECs the right of first refusal to receive support for broadband).

[13] *National Broadband Plan* at 20.

[14] By comparison, the cost model proposed in the *Large Carrier Plan* assesses only the cost to deploy wireline broadband service. *Large Carrier Plan*, Attachment 2 (Summary of Model Results) at 1; Attachment 3 (Model Description) at 4, 9-14.

[15] *See* Letter from James Bradford Ramsey, General Counsel, NARUC, to Marlene H. Dortch, Secretary, FCC, at 2, WC Dkt. 10-90, *et al.* (filed July 20, 2011) ("NARUC Letter") ("The States have long been the source of innovation in dealing with these issues. We are also the 'boots on the ground'").

[16] *See* NTIA, *State Broadband Initiative*, http://www2.ntia.doc.gov/SBDD (last visited Aug. 15, 2011). Under the State Broadband Initiative, NTIA has awarded $293 million to all 50 states, the U.S. territories, and the District of Columbia for broadband planning, resource-building, and data collection for the National Broadband Map.

few, if any, further subsidy requirements. To ensure Broadband Build is forward-looking, the FCC should facilitate deployment of technologies that are best able to meet demand as users' need for speed increases. As described below, publicly-subsidized broadband deployments should be subject to defined and measurable public interest obligations.

Broadband Operations

The Broadband Operations portion of the fund would be directed to costs of ongoing broadband network operations once networks are deployed. Here too, rather than simply assume any network provider requires assistance based upon geography or history, the FCC should require applicants to make a showing of need, including by assessing all current and foreseeable revenues.[17] The FCC should also establish performance objectives to ensure accountability and efficient use of funding. Even once a provider obtains funding, subsidies should extend only for a defined period of time (*e.g.*, three years), with providers required to re-apply rather than enjoy an automatic expectation of funding.[18]

Both Broadband Build and Broadband Operations should be subject to requirements that will ensure that public monies are used wisely and meet our national goals. These requirements could resemble those imposed on recipients of funding for the Broadband Technology Opportunities Program (BTOP), including routine independent audit requirements,[19] screening of key individuals,[20] and detailed quarterly and annual reporting requirements.[21] Fulfilling their vital role, as explained above, the states could implement these accountability measures as a condition of broadband connectivity funding. This application review and award monitoring process will provide much needed accountability and make certain that funding goes where it is most needed, allowing the government to accomplish more with less.

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[17] *See, e.g.*, Comments of the State Members of the Federal State Joint Board on Universal Service at 33-35, WC Dkt. 10-90, *et al.* (filed May 2, 2011); NPRM at ¶ 392.

[18] The *Large Carrier Plan*, on the other hand, provides for a single assessment of support funding, which would then be awarded to the supported carrier annually for 10 years. Once awarded, the plan states the amount cannot be reduced, so long as the recipient meets the CAF support obligations proposed under the plan to build-out within 5 years to a minimum number of households. No other obligations are proposed, and these obligations would expire at the end of the 10-year support term. *Large Carrier Plan*, Attachment 1 (Framework of the Proposal) at 2, 7-8.

[19] *See* Dept. of Commerce, *Pre-Award Notification Requirements for Grants and Cooperative Agreements*, 73 Fed. Reg. 7696, 7697-98 (Feb. 11, 2008) ("DOC Pre-Award Notification") (requiring audits at least once every two years for commercial entities receiving $500,000 or more); Dept. of Commerce, *Financial Assistance Terms and Conditions*, 9-11 (Mar. 2008) *available at* http://oam.eas.commerce.gov/docs/GRANTS/DOC%20STCsMAR08Rev.pdf (authorizing the Department of Commerce Inspector General to conduct an audit of awardees at any time).

[20] *See* DOC Pre-Award Notification at 7697-98 (requiring key individuals, *e.g.*, each officer of a corporation, to submit to background checks by the Office of the Inspector General).

[21] *See* NTIA, *BTOP Recipient Handbook FY 2010*, 30-36 (Nov. 2010), *available at* http://www2.ntia.doc.gov/files/Recipient_Handbook_v1.1_122110.pdf#page=1. *See also* NPRM at ¶¶ 457-76.

All broadband connectivity subsidies should also be subject to specified public interest obligations, including wholesale access and compliance with open Internet rules.[22] Since broadband connectivity support should only be provided in areas where service could not otherwise be offered, support recipients are unlikely to face competition, making wholesale access particularly important if consumers in these areas are to enjoy some of the benefits of competitive choice over these publicly-funded broadband networks. Likewise, openness should be mandated rather than simply an option to pursue by network providers.

II. A Sustainable, Equitable, and Forward-Looking Mechanism is Necessary to Fund Broadband Support.

Logically, USF reform must consider comprehensively both distribution of broadband connectivity support and the contributions required to meet those subsidy obligations.[23] Today's revenue-based contribution mechanism is increasingly problematic. Contribution rates consistently spike well above 10% as the contribution base of interstate telecommunications services dwindles. As bundled offerings of telecommunications and information services proliferate in the marketplace, it is increasingly infeasible to separate telecommunications from information service-derived revenues. For USF restructuring to make sense, the FCC should update the contribution mechanism to create a sustainable, equitable, and forward-looking structure to fund broadband connectivity support.

It is widely accepted that the current interstate service revenues collections system functions poorly. Some parties, including members of the Joint Board, have proposed a connections-based system,[24] which the signatories of this letter agree would be an improvement over the current system. While the signatories may not all agree on the specifics of the appropriate contribution mechanism, we do agree that the Commission must address and include contribution reform when it creates one or more broadband funds.

One approach to a contribution mechanism supported by Google, Vonage, Skype, Ad Hoc and others would be a technologically-neutral assessment on a per-connection basis. The mechanism would be equitable, as all telecommunications providers would contribute either directly or indirectly. Moreover, a contributions approach would be progressive in that consumers would pay only for the connections they use, with users who have only one basic

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[22] *See* Comments of the Wireless Internet Service Providers Association at 7, WC Dkt. 10-90, *et al.* (filed Apr. 18, 2011); Comments of New America Foundation, Consumers Union, and Media Access Project at 12-15, WC Dkt. 10-90, *et al*. (filed Apr. 18, 2011); Comments of EarthLink, Inc. at 16-18, WC Dkt. 10-90, *et al*. (filed Apr. 18, 2011); Comments of Sprint Nextel at 42, WC Dkt. 10-90, *et al.* (filed Apr. 18, 2011) ("Sprint Nextel USF/ICC Comments"); Letter from John Bergmayer, Public Knowledge, to Marlene H. Dortch, Secretary, FCC, WC Dkt. 10-90, *et al*. (filed May 24, 2011) .

[23] *See* NARUC Letter at 2 ("Isn't it time to look at contribution – isn't that an integral part of this process that should be addressed now?").

[24] *In the Matter of Federal-State Joint Board on Universal Service*, Report and Order and Second Further Notice of Proposed Rulemaking, 17 FCC Rcd. 24952, ¶ 70 (2002) ("a number of parties across various industry segments, as well as four out of five state members of the Joint Board, have supported adoption of a connection-based assessment methodology.").

connection bearing the least of the contribution burden. Of course, this approach also has the salient advantage of significantly broadening contributions to fund universal broadband connectivity and linking broadband support to broadband connections. Should any unique circumstances arise that threaten to create inequity, the FCC could easily fashion a complementary form of assessment to bridge any gap.

To determine the contribution for each connection, one option is to establish a base charge for low bandwidth voice connections (including traditional voice and "standalone" wireless voice, *i.e.,* wireless plan with no data) and low-bandwidth data connections (*e.g.,* (the "Base Unit") and apply a tiered multiplier for higher-bandwidth connections. For each connection, the charge could be based on the highest-capacity service (excluding multichannel television services) that rides upon the connection. There would be only one contribution obligation per-connection, even if multiple services ride over it. For example, a broadband customer that uses a VoIP service would contribute only once for the broadband connection with the total contribution calculated based upon the advertised speed of that connection (*e.g.*, approximately $1/month/Base Unit). A wireless voice customer that also has a wireline telephone service at home would trigger contributions for both the wireline and the wireless connection.[25]

Assessing contributions in this manner would mirror the shift of communications networks and services to broadband and IP. It would also help ensure that all facilities-based broadband providers – wireline, cable, and wireless – contribute equitably and that there is a wide base of contributors, consistent Section 254(d) of the Communications Act (Act).[26] Importantly, utilizing connections as the basis for contributions would also be more reliable and sustainable than today's revenues-based approach, as there will be a steady growth in the number and capacity of connections over time.

III. Traffic Exchange Should Be Market-Based, With an FCC Regulatory Backstop.

The FCC's NPRM recognizes that the current ICC system has resulted in instability and uncertainty as carriers undergo the transition to an all-IP future.[27] Legacy pricing and regulatory mechanisms, including above-cost per-minute charges, are inconsistent with the flows of IP network traffic and are already impeding the transition to all-IP networks and distorting carriers' investment incentives.[28] Rather than perpetuating and extending the inefficiencies of regulatory

[25] Based on available data, such a connections-based mechanism could generate funds sufficient to meet the current level of USF funding. *See Local Telephone Competition: Status as of June 30, 2010,* Table 8 (Mar. 2011); *Annual Report and Analysis of Competitive Market Conditions with Respect to Mobile Wireless,* Fifteenth Report, FCC 11-103, at 9 (rel. June 27, 2011); *Internet Access Services Status as of June 30, 2010,* Table 12 (Mar. 2010).

[26] A broadband provider is an "other provider of interstate telecommunications," even if offering information services, because it provides the transmission capacity to subscribers to engage in broadband communications. *See, e.g., Vonage Holding Corp. v. FCC*, 489 F.3d 1232, 1240-42 (D.C. Cir. 2007) (affirming the FCC's finding that interconnected VoIP providers "provide" telecommunications and are subject to a USF payment obligation under the statute's permissive prong).

[27] NPRM at ¶ 41.

[28] *Id.* at ¶ 40.

artifices devised in the 1980s, the FCC should embrace proposals to promote investment in broadband and IP facilities and services to generate innovation and opportunity for the 21st century.

While the shift from today's TDM per-minute access charge system clearly requires a transition, the FCC should rapidly move to a very low rate for TDM-to-TDM traffic exchange, which ultimately could be phased out as networks become all IP. Among other benefits, a low unified rate for access charges for TDM traffic will create incentives for carriers to transition to all-IP networks to take advantage of their lower operating costs and higher revenue potential.

During the network evolution away from TDM, transitional traffic exchange issues for IP-to-TDM traffic will remain. Applying bloated access charges to such traffic will not "accelerate the deployment" of VoIP services and is legally problematic. In contrast, by establishing a bill-and-keep default for all traffic that originates or terminates on an IP network, the FCC will provide an incentive for carriers with TDM networks to transition to IP. Notably, in 2008, the FCC applied a conservative usage and pricing model to estimate that the incremental cost of delivering voice service over an IP network was roughly $0.0000001 per-minute.[29] In making this assessment, the FCC noted "it is clear that the cost of voice traffic on a broadband network is vanishingly small. . . . [A]s carriers move to an all IP broadband world, the incremental costs of terminating voice calls should drop dramatically."[30] Since network costs have continued to decline, bill-and-keep is the pricing model that best reflects the costs and efficiencies of terminating or originating IP traffic.[31] Certainly, applying interstate access rates to such traffic for several years, and then ultimately utilizing a rate of $.0007, established years ago in another context and used by some today, is overly compensatory, well beyond the actual

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[29] *In the Matter of High-Cost Universal Service Support*, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking, 24 FCC Rcd. 6475, ¶ 261 (2008) ("*2008 Order and ICC/USF FNPRM*"), *aff'd Core Communications, Inc. v. FCC*, 592 F.3d 139 (D.C. Cir. 2010), *cert denied*, 131 S. Ct. 597, 626 (2010). Further, a study by Lemay-Yates Associates found that the incremental cost to deliver traffic over a local network ranges between approximately $.01 per gigabyte in a high customer density, high utilization scenario, to $.07 per gigabyte in a low customer density, low utilization scenario. Lemay-Yates Associates, *The Cost of Incremental Internet Transit Bandwidth in the Local Cloud*, 29-30, Mar. 28, 2011. Assuming a data rate of 80 Kbps in each direction, converting these costs to the per-minute cost of a voice call yields a cost of between $.000012 and $.000084 per-minute. *See also* Letter from Devendra T. Kumar, Counsel to Netflix, to Marlene H. Dortch, Secretary, FCC, GN Dkt. 09-191, WC Dkt. 07-52 (filed May 10, 2011) (attachment).

[30] *2008 Order and ICC/USF FNPRM* at ¶¶ 260-61 ("Packet technologies, and the resulting commingling of voice and data traffic, make possible a dramatic reduction in the cost of originating and terminating voice traffic in the network. . . .").

[31] Imposing legacy access charges that were designed as an interim measure for TDM services as proposed by the *Large Carrier Plan* further highlights the inefficiencies of retaining TDM networks. By requiring VoIP services to pay the proposed terminating charges, IP services effectively would be subsidizing TDM networks, increasing the cost of IP-based services and creating strong disincentives to transition away from TDM networks as carriers continue to receive per-minute access charges. *See Large Carrier Plan*, Attachment 1 (Framework of the Proposal) at 10. *Cf.* Letter from Charles W. McKee, Vice President, Government Affairs, Federal and State Regulatory, Sprint-Nextel, to Marlene H. Dortch, Secretary, FCC, on Application of LEC Access Charges to Interconnected VoIP Traffic at 2, WC Dkt. 10-90, *et al.* (filed July 29, 2011) (criticizing the *Large Carrier Plan* "to impose new costs – in the form of legacy access charges – on interconnected VoIP service, even though such access charges are well above economic cost.").

costs of traffic origination and termination. Moreover, imposing such an arbitrary rate would have a devastating effect on IP advanced services deployment, contrary to the goals of Section 706 and the stated objectives of this proceeding.

At the same time, IP-to-IP traffic today is often exchanged based upon capacity or ports, not per-minute as is the case with circuit-switched TDM traffic. IP network charges are generally driven by peak hour network utilization levels, which are poorly reflected by per-minute charges.[32] Voice traffic represents a very small and shrinking portion of overall IP traffic. It is critical that the FCC not allow the small tail of voice traffic to wag the very large dog of IP traffic exchange. To move towards more technology-appropriate rate structures, as an initial matter, the FCC could leave to the market IP-to-IP rates between carriers, including taking a hands-off approach to whether rates should be capacity-based or based on another measure.[33] Instead, regulators could serve as a backstop to allow parties who cannot otherwise agree to have a neutral forum for decision and oversight and to protect consumers and competition from any abusive practices by local carriers.[34]

Finally, as wireline network providers transition to all-IP networks, the FCC should clarify the nature of IP traffic interconnection between local carriers.[35] Interconnection is the glue that holds together the network, and the statutory obligation to offer interconnection should not be obscured by this transition.[36] While the individual signatories to this letter have varied views on the particular provisions of the Act that give the Commission its authority to impose IP interconnection obligations, we all agree that the Commission possesses the authority to ensure that IP-to-IP interconnection is timely and efficiently implemented, and to protect end-users from abusive practices and unreasonable rates. To be clear, we are not calling on the FCC to adopt detailed rules governing IP-to-IP interconnections at this juncture. At this time, we believe that

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[32] *See, e.g., 2008 Order and ICC/USF FNPRM* at ¶ 261, n. 690.

[33] *See, e.g.*, Letter from Glenn S. Richards, Executive Director, VON Coalition, to Marlene H. Dortch, Secretary, FCC, 2, WC Dkt. 10-90, *et al.* (filed May 26, 2011); Reply Comments of Bandwidth.com, Inc. at 6-7, WC Dkt. 10-90, *et al*. (filed May 23, 2011); Sprint Nextel USF/ICC Comments at 7-8.

[34] *See, e.g.*, Letter from Karen Reidy, COMPTEL, and tw telecom inc., to Marlene H. Dortch, Secretary, FCC, at 2, WC Dkt. 10-90, *et al.* (filed Aug. 11, 2011) ("the most important action the Commission can take to attain its overarching goal of promoting the deployment of broadband and IP technology is to confirm in no uncertain terms that IP-to-IP interconnection is subject to Sections 251 and 252 of the Act. . . . [T]he Commission does not need to establish detailed technical regulations governing IP-to-IP interconnection at this time").

[35] NPRM at ¶ 679. *See also Petition for Declaratory Ruling that tw telecom inc. Has the Right To Direct IP-to-IP Interconnection Pursuant To Section 251(c)(2) of The Communications Act, As Amended, For The Transmission And Routing of tw telecom's Facilities-Based VoIP Services and IP-in-The-Middle Voice Services*, WC Dkt. 11-119 (filed June 30, 2011); Letter from Charles W. McKee, Vice President, Government Affairs, Federal and State Regulatory, Sprint-Nextel, to Marlene H. Dortch, Secretary, FCC, on Interconnection of IP Networks for the Exchange of Broadband Voice Traffic, WC Dkt. 10-90, *et al.* (filed Jul., 29, 2011).

[36] *See* Reply Comments of PAETEC Holding Corp., *et al*. at 2-5, WC Dkt. 10-90, *et al*. (filed May 23, 2011); Sprint Nextel USF/ICC Comments at 27; Comments of XO Communications, LLC at 15-16, WC Dkt. 10-90, *et al*. (filed Apr. 18, 2011); Comments of COMPTEL at 4-7, WC Dkt. 10-90, *et al*. (filed Apr. 18, 2011); Comments of Cox Communications, Inc. at 18-19, WC Dkt. 10-90, *et al*. (filed Apr. 18, 2011); Comments of EarthLink, Inc. at 2-7, WC Dkt. 10-90, *et al*. (filed Apr. 18, 2011); Time Warner Cable ICC Comments at 12-13. *See, also*, Kevin Werbach, *Only Connect*, 22 Berkeley Tech. L.J. 1233 (2007).

the details of IP-to-IP interconnection can be left to the negotiation process, with the FCC serving as a backstop to protect end-users, and to allow parties who cannot otherwise agree to have a neutral forum for decision and oversight. At a minimum, local carriers should be required to negotiate in good faith IP interconnection requests, and all complaints over IP interconnection disputes should be resolved by the FCC.

* * *

We encourage and look forward to feedback on this suggested regulatory framework that accommodates, rather than stifles, the surging tide of market-based and technological innovations. Through an ongoing and open dialogue that leads to concrete solutions, the FCC will be able to proceed quickly to attain the important goals of promoting the deployment and use of advanced broadband connectivity and IP networks.

Sincerely,

/s/ Ad Hoc Telecommunications Users Committee

/s/ Google Inc.

/s/ Skype Communications S.A.R.L.

/s/ Sprint Nextel Corporation

/s/ Vonage Holdings Corp.